

CLAIMS

1. An arrangement for the insertion into the body, through the skin, of a catheter (1) with a proximal base (2), where this arrangement includes a needle (3) which has a puncture end and a cage (5), which extends the base in the proximal direction, where this chamber forms a chamber (6) through which the needle slides from a proximal entrance (7) to an opposite distal exit (9) and is equipped with a sprung flexible steel blade (17, 17b) to hold the puncture end of the needle in the chamber when the needle is withdrawn from the cannula, characterised in that this blade is positioned across the chamber close to the proximal entrance (7) of the chamber perpendicular to the needle and traversed by the needle, where the blade and the needle include resources (19, 21, 22) that combine so that the blade is at rest and traversed freely by the needle when the needle is pushed in the distal direction, and so that the blade stops the needle and is bent by the needle when the needle is drawn in the proximal direction beyond a given axial position, so that the bent blade inclines the needle and applies a return force to the needle which tends to force the needle back in the distal direction until the puncture end comes up against a wall of the chamber.

2. An arrangement according to claim 1 in which the

flexible blade has a perforation (19) for the passage of the needle, and ahead of the said perforation, the needle has its section modified locally (21, 22) so that this section is stopped by the perforation in the blade during the withdrawal movement of the needle in the proximal direction, this modified section being located at a distance from the puncture end of the needle so that the contact of the modified section with the perforation in the blade occurs after this end has arrived in the chamber during the operation for removal of the needle.

3. An arrangement according to claim 1 or 2, in which the chamber has an end wall (8) in the distal direction which includes a groove (10) into which the puncture end (3a) of the inclined needle enters.

4. An arrangement according to any one of claims 1 to 3, in which the flexible blade constitutes a branch (17) of a blade shaped as an L, and which has a longitudinal branch (16) fixed to a longitudinal wall of the chamber and a transverse branch (17) which constitutes the flexible blade equipped with a perforation (19) for the passage of the needle.

5. An arrangement according to any one of claims 1 to 3, in which the flexible blade is shaped as a U, constituting a first rear transverse branch (17a) located

at the entrance of the chamber, and equipped with a perforation (19) for the passage of the needle, and a second front transverse branch (17b) parallel to the first branch, located in the said chamber and equipped with a perforation (20) for the passage of the needle, where the perforation (19) of the rear branch is not sufficiently large to allow passage of the modified section of the needle, but the perforation (20) of the front branch is able to allow this section to pass.

6. An arrangement according to claim 5, in which the catheter base has an external rim (13) and the cage includes a mobile lever (26) which has a stop dog (14) locked to this rim in one position of the lever, and in which the second branch (17b) of the flexible blade is continued by a third branch (17c) more or less at the bracket of the second branch, and which operates the said lever to release the dog.

7. An arrangement according to one of claims 1 to 6, in which, ahead of the chamber, the cage includes a nose (11) which slots into the catheter base and which is traversed longitudinally by an aperture (12) for the passage of the needle.

8. An arrangement according to any one of claims 1 to 7, in which the needle (3) is equipped with a base (4), and

in which the cage includes a transverse plate (24) projecting laterally, against which presses one wall (25) of the base of the needle when the needle is in its working position.

9. An arrangement according to claim 8, in which the said blade (12) is suspended from the said plate (24) of the cage.

10. An arrangement according to any one of claims 1 to 9, in which the needle (3) includes a base (4) bearing against the flexible blade when the needle is in its working position.

11. The application of an arrangement according to any one of claims 1 to 10, for the insertion of a short catheter into a vein.